Title (en)

GRID-CONNECTED OPERATION CONTROL METHOD AND APPARATUS FOR FUEL CELL COMBINED HEAT AND POWER SYSTEM

Title (de)

NETZGEKOPPELTES BETRIEBSSTEUERUNGSVERFAHREN UND VORRICHTUNG FÜR EIN KOMBINIERTES WÄRME- UND STROMSYSTEM MIT BRENNSTOFFZELLEN

Title (fr)

PROCÉDÉ ET APPAREIL DE COMMANDE DE FONCTIONNEMENT CONNECTÉS À UNE GRILLE POUR SYSTÈME DE CHALEUR ET DE PUISSANCE COMBINÉ DE PILE À COMBUSTIBLE

Publication

EP 4358338 A1 20240424 (EN)

Application

EP 22845305 A 20220719

Priority

- CN 202110819601 A 20210720
- CN 2022106446 W 20220719

Abstract (en)

Disclosed are a fuel cell combined heat and power system and a grid-connected operation control method therefor. The fuel cell combined heat and power system includes a thermoelectric module, a DC/DC conversion module, a DC/AC inverter module and a thermal management module; the thermoelectric module is connected to a DC bus through the DC/DC conversion module, and an inverter unit is connected to the DC bus; an output end of the DC/DC conversion module is connected to a DC load of a user, and an output end of the inverter unit is connected to an AC load of the user and a grid; and the control method includes: correcting output power of a fuel cell module according to a real-time heat supply temperature to acquire an output power target value; and controlling a switching tube of the DC/DC conversion module to be turned on or off according to the output power target value.

IPC 8 full level

H02J 3/32 (2006.01); **H02J 3/38** (2006.01); **H02J 3/46** (2006.01)

CPC (source: EP)

H02J 3/32 (2013.01); **H02J 3/38** (2013.01); **H02J 3/46** (2013.01); Y02E 60/50 (2013.01)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4358338 A1 20240424; CN 115642626 A 20230124; WO 2023001140 A1 20230126

DOCDB simple family (application)

EP 22845305 A 20220719; CN 202110819601 A 20210720; CN 2022106446 W 20220719